

Work Order ID 56335

February 18, 2010 7:36:45 AM



Page 1

Item ID: D3689-1

Accept



Setup Start



Revision ID:

Stop



Item Name: SLEEVE

Start Date: 18/02/2010 Start Qty: 5.00



Cust Item ID:

Required Date: 25/02/2010 Req'd Qty: 5.00



Customer:

Reference: Return 2010 / RA11003 / NCR09-111

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date: 10-02-18

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3689

Rev B

100

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

Original B46051. See NCR09-111.
Parts in good condition.

0.00

SL 10/02/17

(X5)

Quality Control

110

0.00



Hardinge

Memo

Re-machine threads as per the drawing. Ensure to be carefull. SL 10/03/03

0.00

(5)

Hardinge CNC Lathe Small

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

Record thread dims on an FAI

0.00

SL 10/03/03

Quality Control

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

10-1-1941

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10-1-1941

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00

8/10/03/04

QC

trapped to edge of .166" hole. Both
ends

Memo

0.00

(X5)

Quality Control

140

Outsource process - NDT per QSI038 4.1

0.00

Outsource2

Memo

0.00

Outsource process - NDT

P/O: 11499

CZ 10/3/11 (5)

150

Receive & Inspect for Damage & Mat'l Certs

0.00

Packaging

Memo

0.00

Packaging

Attached NDT results

CZ 10/3/11 5

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Page 3

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

8/10/03/12

(X)

170



Packaging

Packaging

Identify as per dwg & Stock Location: 82

0.00

Memo

0.00

10-3-12 (5X) SP

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/03/10 J

mk

10-3-12

ADAMS, J. S. & J. L. ...

DART AEROSPACE LTD		Work Order: 56335
Description: Sleeve		Part Number: D3689-1
Inspection Dwg: D3689	Rev: B	Page 1 of 1

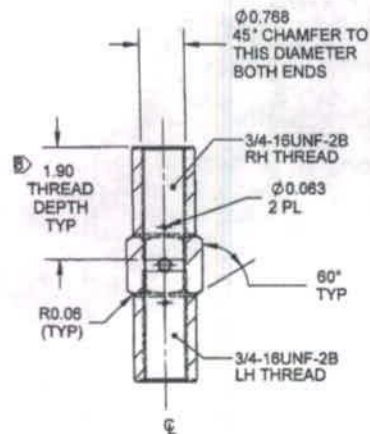
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

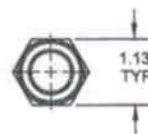
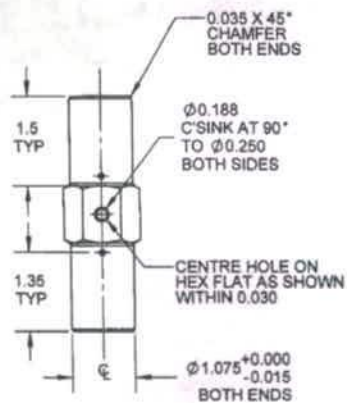
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.90	+/-0.030	2.00				
Ø0.768	+/-0.010	N/A				
Ø0.063	+0.005/-0.001					
R0.06	+/-0.030					
3/4-16UNF-2B	N/A					
0.035 x 45°	+/-0.010 x 0.5°					
1.5	+/-0.030					
1.35	+/-0.030					
Ø0.188	+0.005/-0.001					
90°	0.5°					
Ø0.250	+/-0.010					
Ø1.075	+0.000/-0.015					
1.13	+/-0.030					
4.00	+/-0.030					

Measured by: JH	Audited by: SC	Prototype Approval: N/A
Date: 10/03/03	Date: 01/03/04	Date: N/A

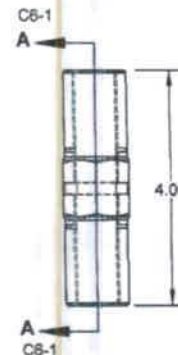
Rev	Date	Change	Revised by	Approved
A	09.05.11	New Issue	KJ	



SECTION A-A
D3-1



D3689-1 SLEEVE



W/O
56335

RELEASED
08/12/15

- NOTES:
- 1) MATERIAL: 17-4PH STAINLESS STEEL ROUND BAR PER AMS 5843 H-900 CONDITION
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.87 lb
 - 8) DIMENSION SHOWN IS MINIMUM DEPTH OF FULL THREAD
 - 9) LPI PER ASTM 1417 LEVEL 2

DESIGN	RF	CHANGE TO 17-4PH H-900 (2N AS-1); REFORMATTED TO CURRENT DWG STANDARDS	RF	08.11.24
DRAWN	RF	NEW ISSUE	RF	08.05.22
CHECKED	RF		BY	DATE
MFG. APPR.	RF			
APPROVED	RF			
DE APPR.	RF			
DATE	08.11.24			

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. REV. B
D3689 SHEET 1 OF 1
TITLE SCALE
SLEEVE NTS

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Section 1. The first part of the report is a general statement of the purpose and scope of the study.

The second part of the report is a description of the methods used in the study. This includes a description of the subjects, the instruments used, and the procedures followed.

The third part of the report is a description of the results of the study. This includes a description of the data collected and the analysis of the data.

The fourth part of the report is a discussion of the results of the study.

The fifth part of the report is a conclusion. This includes a summary of the findings of the study and a statement of the implications of the findings.

The sixth part of the report is a list of references. This includes a list of the books, articles, and other sources used in the study.



LIQUID PENETRANT TEST REPORT

P- 15319

CLIENT DART Aerospace DATE March 11-2010 PAGE 1 OF 1
ATTENTION LINDA/CHANTEL ACUREN JOB NO. 188-10-0708 TIME AM ☒ PM ☐
ADDRESS 1270 ABELDEN ST. PO/WO No. ---
HAVERSBURY ON. K04 1K7 WORK LOCATION SHOP
PROJECT F.P.I. on cross TUBES ACCEPTANCE STD. ASTM 1417 REV./DATE 2007
ITEM(S) EXAMINED Four cross TUBES

JOB DESCRIPTION STAINLESS STEEL PROCEDURE NO. LT-002 REV./DATE 2007 TECHNIQUE NO. LT-T042 REV./DATE 2007
PART NO. --- MATERIAL ALUMINUM ALLOY THICKNESS ---
SCOPE WET FLUORESCENT LIQUID PENETRANT INSPECTION
CARRIED OUT 100% EXTERNAL

TEST DETAILS

METHOD ☒ FLUORESCENT ☐ VISIBLE ☒ WATER WASH ☐ SOLVENT REMOVABLE ☐ POST EMULSIFIED
FAMILY BRAND MAGNA FLUX BLACK LIGHT S/N 16459 ☐ OUTPUT > 1000 μ W/cm² ☐ AMBIENT < 2 fc
PENETRANT 2 LG7 MINIMUM DWELL TIME 450 MIN. LIGHTING EQUIP. ☐ FLASHLIGHT ☐ TROUBLELIGHT ☐ OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER H2O MINIMUM DRY TIME >10 MIN. OTHER LABINO
DEVELOPER SKD 52 MINIMUM DWELL TIME 10 MIN. LIGHT METER S/N 1078866 CAL DUE DATE MAY 7-2010
DEVELOPER TYPE ☒ NON AQUEOUS ☐ AQUEOUS ☐ DRY

TEST SURFACE

SURFACE CONDITION ☐ AS GROUND ☐ AS WELDED ☒ MACHINED ☐ SHOT BLASTED ☐ CLEAN BARE METAL
SURFACE TEMPERATURE ☐ < -4°C/ 20°F ☐ -4°C/ 20°F TO 10°C/50°F ☒ 10°C/50°F TO 52°C/125°F ☐ > 52°C/125°F

RESULTS- (☐ METRIC ☐ IMPERIAL)

1	CROSSTUBE W.O. 56220	✓
1	CROSSTUBE W.O. 56221	✓
1	CROSSTUBE W.O. 55919	✓
1	CROSSTUBE W.O. 55920	✓
5	SLEEVE'S W.O. 56335	✓
2	MOUNT'S W.O. 56462	✓

S
10/19/10

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